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EXAMINER
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GWARTNEY, ELIZABETH A

ART UNIT	PAPER NUMBER
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1794

NOTIFICATION DATE	DELIVERY MODE
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09/01/2009

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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<b>Office Action Summary</b>	<b>Application No.</b> 10/530,920	<b>Applicant(s)</b> MIRANDA ET AL.	
	<b>Examiner</b> Elizabeth Gwartney	<b>Art Unit</b> 1794	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 11 August 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-3 and 7-36 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 7-36 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 08/11/2009 has been entered.
2. Claims 4-6 have been cancelled and claims 33-36 have been added. Claims 1-3 and 7-36 are pending.

### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1-3, 7-11 and 36 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim 1 recites " a layer of coating for said nut that consists of an edible protective antioxidant film, said film consisting of an edible compound selected from the group consisting

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of a cellulose derivative selected from the group consisting of hydroxypropylmethyl cellulose (HPMC), hydroxypropyl cellulose (HPC), methyl cellulose (MC), carboxymethyl cellulose (CMC), ethylmethyl cellulose (EMC), and mixture thereof, maltodextrin (MD), a lipid and a combination of various lipids.”

While there is support in the specification for a layer of coating that *comprises* an edible coating film, said film *comprising* an edible compound selected amongst hydroxypropylmethyl cellulose, hydroxypropyl cellulose, methyl cellulose, carboxymethyl cellulose, ethylmethyl cellulose, maltodextrin, a lipid or a combination of various lipids, and their mixtures (p.3/L16-22, p.5/L30-35), there is no support in the specification wherein said film *consisting* of an edible compound selected from the group consisting of a cellulose derivative selected from the group consisting of hydroxypropylmethyl cellulose, hydroxypropyl cellulose, methyl cellulose, carboxymethyl cellulose, ethylmethyl cellulose and mixtures thereof, maltodextrin, a lipid and a combination of various lipids.

Further, while there is support in the specification for an edible film, there is no explicit disclosure in the specification of a *protective antioxidant* film.

Claim 36 recites “ a layer of coating for said nut that consist of an edible protective antioxidant film, said film consisting of: a first edible compound selected from the group consisting of a cellulose derivative selected from the group consisting of hydroxypropylmethyl cellulose, hydroxypropyl cellulose, methyl cellulose, carboxymethyl cellulose, ethylmethyl cellulose and mixtures thereof and maltodextrin; and a second edible compound selected from the group consisting of a lipid, a combination of various lipids, acacia gum, and a protein.”

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While there is support in the specification for an edible coating film, said film **comprising** an edible compound selected amongst hydroxypropylmethyl cellulose, hydroxypropyl cellulose, methyl cellulose, carboxymethyl cellulose, ethylmethyl cellulose, maltodextrin, acacia gum, a lipid or a combination of various lipids, and their mixtures (p.3/L16-22, p.5/L30-35) and further comprising a protein, there is no support for an edible coating film consisting of a first and second edible compound selected from the recited groups.

Further, while there is support in the specification for an edible film, there is no explicit disclosure in the specification of a **protective antioxidant** film.

6. Claims 7-8, 11 and 33 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claims 7-8, the recitation "[t]he nut composition according to claim 1 wherein a lipid or a combination of various lipids [or a protein] is added to the edible protective antioxidant film." renders the claims indefinite. Given that the transitional phrase "consisting of" excludes any ingredient not specified in the claim, since claims 7-8 depend from claim 1, it is not clear what applicants intend the scope of the claims to be.

Regarding claim 11, the recitation "[t]he nut composition according to claim 1, which further comprises an additive selected from the group consisting of. . ." renders the claim indefinite. Given that the transitional phrase "consisting of" excludes any ingredient not specified in the claim, since claim 11 depends from claim 1, it is not clear what applicants intend the scope of the claim to be.

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Regarding claim 33, the recitation "[t]he nut composition of claim 1, wherein acacia gum (AG) is added to the edible protective antioxidant film" renders the claim indefinite. Given that the transitional phrase "consisting of" excludes any ingredient not specified in the claim, since claim 33 depends from claim 1, it is not clear what applicants intend the scope of the claim to be.

### ***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

9. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later

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invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

10. Claims 1-3, 8-15, 17-23, 25, 27-28, 30-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Steele et al. (WO 83/00278) in view of Grillo et al. (US 5,470,581).

Regarding claim 1 and 33-35, Steele et al. disclose a nut composition provided with an edible coating (Abstract), which comprises:

- a nut(*see* peanut – Abstract), and
- a layer of a hydrophobic colloid film former for said nut consisting of an edible compound selected from the group consisting of acacia gum, cellulose derivatives and dextrans (p.8/L25-p.9/L3, *see* wherein a solution of hydrocolloid, i.e. gum acacia, is added to the peanuts to provide a uniform coating, p. 12/L24-30, p.13/L4-6).

While Steele et al. disclose an edible compound selected from the group consisting of acacia gum, cellulose derivatives and dextrans (P.8/L25-p.9/L3), the reference does not explicitly disclose hydroxypropylmethyl cellulose (HPMC), hydroxypropyl cellulose (HPC), methyl cellulose (MC), carboxymethyl cellulose (CMC), ethylmethyl cellulose (EMC), maltodextrin (MD) or their mixtures.

Grillo et al. teach a protective film for coating food forms comprising a mixture of maltodextrin and a cellulose derivative (Abstract, C2/L1-5) wherein the cellulose derivative includes methyl cellulose (MC), hydroxypropyl cellulose (HPC), hydroxypropylmethyl cellulose (HPMC), or carboxymethyl cellulose (CMC) (Abstract, C1/L60-C2/L5). Further, Grillo et al.

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teach maltodextrin, in combination with cellulosic polymers, exhibits excellent adhesive qualities, enhanced gloss characteristics, and reduced incidence of cloudiness (C5/L35-39).

Steele et al. and Grillo et al. are combinable because they are concerned with the same field of endeavor, namely, compositions for edible films. It would have been obvious to one of ordinary skill in the art at the time of the invention to have added maltodextrin and cellulosic polymers, as taught by Grillo et al., to the acacia gum film coating of Steele et al. for the purpose of improving the clarity of the coating. Further, doing so would improve the adhesive and gloss characteristics of the protective film coating.

Given modified Steele et al. disclose a coating composition identical to that presently claimed, it is clear that the composition would intrinsically display antioxidative properties.

Regarding claim 33, although modified Steele et al. does not disclose **adding** acacia gum to the edible protective antioxidant film, it is noted that “[E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process”, *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985) . Further, “although produced by a different process, the burden shifts to applicant to come forward with evidence establishing an unobvious difference between the claimed product and the prior art product”, *In re Marosi*, 710 F.2d 798, 802, 218 USPQ 289, 292 (Fed. Cir.1983). See MPEP 2113.



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Therefore, absent evidence of criticality regarding the presently claimed process and given that modified Steele et al. meets the requirements of the claimed composition, modified Steele et al. clearly meets the requirements of present claim 33.

Regarding claims 2-3, modified Steele et al. disclose all of the claim limitations as set forth above. Further, Steele et al. disclose that said nut is selected from the group consisting of peanuts (Abstract) wherein said nut is whole (p.4/L29-30).

Regarding claims 8 and 11, modified Steele et al. disclose all of the claim limitations as set forth above. Further, Steele et al. disclose wherein said edible compound is a vegetable protein (p.9/L1). Steele et al. also disclose a layer of particulate seasoning material, such as sugar, on top of the hydrophilic film former layer (Abstract, p.9/L14-30, p.12/L29).

Regarding claim 8, although modified Steele et al. does not disclose **adding** protein to the edible protective antioxidant film, it is noted that “[E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process”, *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985) . Further, “although produced by a different process, the burden shifts to applicant to come forward with evidence establishing an unobvious difference between the claimed product and the prior art product”, *In re Marosi*, 710 F.2d 798, 802, 218 USPQ 289, 292 (Fed. Cir.1983). See MPEP 2113.

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Therefore, absent evidence of criticality regarding the presently claimed process and given that modified Steele et al. meets the requirements of the claimed composition, modified Steele et al. clearly meets the requirements of present claim 8.

Regarding claim 9, modified Steele et al. disclose all of the claim limitations as set forth above. Further, Steele et al. disclose that the quantity of edible compound present on the coated nut, expressed in dry weight in relation to the total weight of the coated nut lies between 0.05 and 2% by weight (p.9/L9-11).

Regarding claim 10, modified Steele et al. disclose all of the claim limitations as set forth above, however, Steele et al. do not disclose a nut composition in which the thickness of the coating layer of said nut, which comprises an edible film, ranges from 5  $\mu$ m to 1 mm. As hardness and continuity of the coating are variables that can be modified, among others by adjusting said thickness of coating, with said hardness and continuity of the coating both increasing as the coating thickness is increased, the precise coating thickness would have been considered a result effective variable by one having ordinary skill in the art at the time the invention was made. As such, without showing unexpected results, the claimed coating thickness cannot be considered critical. Accordingly, one of ordinary skill in the art at the time the invention was made would have optimized, by routine experimentation, the thickness of the edible coating of Steele et al. to obtain the desired balance between the continuity of the coating and the hardness of the final nut product (*In re Boesch*, 617 F.2d. 272, 205 USPQ 215 (CCPA 1980)), since it has been held that where the general conditions of the claim are disclosed in the

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prior art, discovering the optimum or workable ranges involves only routine skill in the art. (*In re Aller*, 105 USPQ 223).

Regarding claims 12-15, Steele et al. disclose a method for producing a nut coated with an edible coating (Abstract) according to claim 1, as set forth above, which comprises the steps of:

- applying a filmogenic solution that comprises an edible compound selected from the group consisting of acacia gum (i.e. gum acacia), cellulose derivatives and dextrans on the surface of a nut to be coated (Abstract, p.8/L25-p.9/L3) and
- drying the filmogenic solution deposited on the surface of said nut to be coated (see roasting – p. 10/L12-24).

While Steele et al. disclose an edible film comprising an edible compound selected from the group consisting of acacia gum, cellulose derivatives and dextrans (p.8/L25-p.9/L3), the reference does not explicitly disclose hydroxypropylmethyl cellulose (HPMC), hydroxypropyl cellulose (HPC), methyl cellulose (MC), carboxymethyl cellulose (CMC), ethylmethyl cellulose (EMC), maltodextrin (MD) or their mixtures.

Grillo et al. teach a protective film for coating food forms, comprising a mixture of maltodextrin and a cellulose derivative (Abstract, C2/L1-5) wherein the cellulose derivative includes methyl cellulose (MC), hydroxypropyl cellulose (HPC), hydroxypropylmethyl cellulose (HPMC), or carboxymethyl cellulose (CMC) (Abstract, C1/L60-C2/L5). Further, Grillo et al. teach maltodextrin, in combination with cellulosic polymers, exhibits excellent adhesive qualities, enhanced gloss characteristics, and reduced incidence of cloudiness (C5/L35-39).

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Steele et al. and Grillo et al. are combinable because they are concerned with the same field of endeavor, namely, compositions for edible films. It would have been obvious to one of ordinary skill in the art at the time of the invention to have added maltodextrin and cellulosic polymers, as taught by Grillo et al., to the acacia gum film coating of Steele et al. for the purpose of improving the clarity of the coating. Further, doing so would improve the adhesive and gloss characteristics of the protective film coating.

Regarding claim 17, modified Steele et al. disclose all of the claim limitations as set forth above. Further, Steele et al. disclose that said edible film further comprises a protein (p.9/L1).

Regarding claim 18, modified Steele et al. disclose all of the claim limitations as set forth above. Further, Steele et al. disclose said filmogenic solution comprises one or more edible compounds in a concentration between 1% - 50% by weight (see from about 5 to 15% by weight - p.10/L8-9).

Claim 19, modified Steele et al. disclose all of the claim limitations as set forth above. Further, Steele et al. disclose a filmogenic solution comprising an edible compound selected from the group of cellulose derivatives in a concentration between 2 and 14% (see from about 2 to about 10% of the weight of the coating (p.9/L12-13).

Regarding claim 20, modified Steele et al. disclose all of the claim limitations as set forth above. Steele et al. disclose said filmogenic solution is applied on the nut to be coated in a rotary drum by dripping (*see* rotatable coating reel and rate of addition (i.e. dripping - p.7/L17-18, p.8/L13).

Regarding claim 21, modified Steele et al. disclose all of the claim limitations as set forth above. Further, Steele et al. disclose that the quantity of edible compound present on the coated

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nut, expressed in dry weight in relation to the total weight of the coated nut lies between 0.05 and 2% by weight (p.9/L9-11).

Regarding claim 22, modified Steele et al. disclose all of the claim limitations as set forth above and Steele also discloses that the drying of said filmogenic solution deposited on said nut to be coated is done with air at a temperature equal to or lower than 200°C (see from about 150° to about 180°C – p.10/L17-18).

Regarding claim 23, modified Steele et al. disclose all of the claim limitations as set forth above. Further, Steele et al. disclose that the drying of said filmogenic solution deposited on said nut to be coated comprises the addition of a compound in powder form, selected from the group consisting of an edible protein (i.e. peanut skins – p.5/L14-20, p.9/L14-21).

Regarding claim 25, Steele et al. disclose all of the claim limitations as set forth above. Further, Steele et al. disclose that the drying of said filmogenic solution deposited on said nut is done in an oven (p.10/L14).

Regarding claim 27, modified Steele et al. disclose all of the claim limitations as set forth above. While Steele discloses a method for producing a nut coated with an edible coating including application and drying stages, the reference does not explicitly disclose repeating the stages a variable number of times. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have repeated the application and drying stages. Mere duplication of the application and drying steps has not patentable significance unless a new and unexpected result is produced.

Regarding claims 28 and 30, modified Steele et al. disclose all of the claim limitations as set forth above. Steele et al. also disclose that layers are formed which are the same or different

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(Abstract). Further Steele et al. disclose the addition of one or more additives to said coated nut (*see* sugar – Abstract).

Regarding claims 31-32, modified Steele et al. disclose all of the claim limitations as set forth above and further discloses that the nut comprises an additional coating selected from the group consisting of sugar and salt, which covers said coated nut (p.3/L27-32, p.5/L14-20, p.9/L14-30). Steele et al. also disclose a derivative of a nut which comprises a nut obtainable by means of the method according to claim 12, and further comprises an additional coating selected from the group consisting of sugar and salt, which covers said coated nut (p.3/L27-32, p.5/L14-20, p.9/L14-30).

11. Claims 7, 16 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Steele et al. (WO 83/00278) in view of Grillo et al. (US 5,470,581) and further in view of Kester et al. (“An Edible Film of Lipids and Cellulose Ether”).

Regarding claims 7 and 16, modified Steele et al. disclose all of the claim limitations as set forth above. While Steele et al. disclose said edible compound consists of cellulose derivatives, the reference does not explicitly disclose said edible compound comprises a mixture of (i) a cellulose ether and (ii) a lipid or a combination of various lipids.

Kester et al. teach an edible film comprising a cellulose ether and lipid (Abstract). Further, Kester et al. teach that lipid-based films effectively retard transport of moisture (Abstract).

Steele et al., Grillo et al. and Kester et al. are combinable because they are concerned with the same field of endeavor, namely, edible films comprising cellulose derivatives. It would

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have been obvious to one of ordinary skill in the art at the time the invention was made to have used a mixture of lipid and cellulose ether, as taught by Kester et al., in the edible film coating of Steele et al. for the purpose of mitigating moisture migration.

Regarding claim 36, Steele et al. disclose a nut composition provided with an edible coating (Abstract), which comprises:

- a nut(*see* peanut – Abstract), and
- a layer of a hydrophobic colloid film former for said nut consisting of an edible compound selected from the group consisting of acacia gum, cellulose derivatives and dextrans (p.8/L25-p.9/L3, *see* wherein a solution of hydrocolloid, i.e. gum acacia, is added to the peanuts to provide a uniform coating, p. 12/L24-30, p.13/L4-6).

While Steele et al. disclose an edible compound selected from the group consisting of acacia gum, cellulose derivatives and dextrans (P.8/L25-p.9/L3), the reference does not explicitly disclose hydroxypropylmethyl cellulose (HPMC), hydroxypropyl cellulose (HPC), methyl cellulose (MC), carboxymethyl cellulose (CMC), ethylmethyl cellulose (EMC), maltodextrin (MD) or their mixtures.

Grillo et al. teach a protective film for coating food forms comprising a mixture of maltodextrin and a cellulose derivative (Abstract, C2/L1-5) wherein the cellulose derivative includes methyl cellulose (MC), hydroxypropyl cellulose (HPC), hydroxypropylmethyl cellulose (HPMC), or carboxymethyl cellulose (CMC) (Abstract, C1/L60-C2/L5). Further, Grillo et al. teach maltodextrin, in combination with cellulosic polymers, exhibits excellent adhesive qualities, enhanced gloss characteristics, and reduced incidence of cloudiness (C5/L35-39).

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Steele et al. and Grillo et al. are combinable because they are concerned with the same field of endeavor, namely, compositions for edible films. It would have been obvious to one of ordinary skill in the art at the time of the invention to have added maltodextrin and cellulosic polymers, as taught by Grillo et al., to the acacia gum film coating of Steele et al. for the purpose of improving the clarity of the coating. Further, doing so would improve the adhesive and gloss characteristics of the protective film coating.

Further, Steele et al. does not disclose a film consisting of a second edible compound selected from the group consisting of a lipid, a combination of various lipids, acacia gum (AG) and a protein.

Kester et al. teach an edible film comprising a cellulose ether and lipid (Abstract). Further, Kester et al. teach that lipid-based films effectively retard transport of moisture (Abstract).

Steele et al., Grillo et al. and Kester et al. are combinable because they are concerned with the same field of endeavor, namely, edible films comprising cellulose derivatives. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have used a mixture of lipid and cellulose ether, as taught by Kester et al., in the edible film coating of Steele et al. for the purpose of mitigating moisture migration.

Given modified Steele et al. disclose a coating composition identical to that presently claimed, it is clear that the composition would intrinsically display antioxidative properties.



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12. Claims 24 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Steele et al. (WO 83/00278) in view of Grillo et al. (US 5,470,581) as applied to claim 12, and further in view of Fellows (“Food Processing Technology-Principles and Practice”).

Regarding claims 24 and 26, while modified Steele et al. disclose drying of said filmogenic solution in an oven, the reference does not disclose drying in a rotary drum by means of a blower or in a drying tunnel that comprises areas for hot air drying, infra-red lamp radiation drying, and cold air cooling. Fellows teaches that rotary drum and tunnel driers were well known in the art at the time the invention was made (p. 324). Further, it was well known that tunnel drying includes multiple stages with the first stage being the hottest, the exit stage the coldest, and the intermediate stage can include infra-red radiation. Fellows also teaches that the type of dryer chosen will depend on cost, capacity, fuel efficiency, and labor requirement (p.325). As the instant specification is silent to unexpected results, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use any drier type, including a rotary drum drier and a drying tunnel with three stages to dry the filmogenic solution of Steele et al. because it would amount to nothing more than the use of a known drier for its intended use in a known environment to accomplish entirely expected result.

13. Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over Steele et al. (WO 83/00278) in view of Grillo et al. (US 5,470,581) as applied to claim 12 above, and further in view of Seaborne et al. (US 4,820,533).

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Regarding claim 29, modified Steele et al. disclose all of the claim limitations as set forth above, however, Steele et al. do not disclose the inclusion of one or more additives to said filmogenic solution.

Seaborne et al. teach of edible barriers comprising plasticizers (C8/L25-40). Further, Seaborne et al. teach that plasticizers soften edible barriers made from cellulose ethers making them less brittle (C8/L25-40).

Steele et al., Grillo et al. and Seaborne et al. are combinable because they are concerned with the same field of endeavor, namely, edible films useful for foods. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have included a plasticizer, as taught by Seaborne et al., as an additive in the filmogenic solution of Steele et al. for the purpose of making a less brittle edible film coating.

### ***Response to Arguments***

14. Applicant's arguments filed 08/11/2009 have been fully considered but they are not persuasive.

Applicants argue that there is no motivation to combine Steele et al. with Grillo et al. because Grillo et al teaches that plasticizer is an essential element of a coating, where all claims and examples include composition of 2.5%-20% plasticizer. Because amended claim 1 recites a "film consisting of an edible compound . . ." and thus do not include the plasticizer of Grillo et al, Grillo et al. teaches away from amended Claim 1.

In this case, Steele et al. discloses a single layer of coating comprising an edible compound selected from the group consisting of acacia gum, cellulose derivatives and dextrans

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(p.8/L25-p.9/L3). While Grillo et al. does not teach a coating consisting of one of the recited edible compounds, Grillo et al. is used as a teaching reference, and therefore, it is not necessary for this secondary reference to contain all the features of the presently claimed invention, *In re Nievelt*, 482 F.2d 965, 179 USPQ 224, 226 (CCPA 1973), *In re Keller* 624 F.2d 413, 208 USPQ 871, 881 (CCPA 1981). Rather Grillo et al. teaches a certain concept, namely the use of a maltodextrin and cellulose derivative combination to impart adhesive and gloss characteristics in an edible coating, and in combination with Steele et al., disclose the presently claimed invention.

Applicants find that both Steele et al. and Grill et al. disclose complex multi-component coatings that teach away from amended claim 1. Applicants argue that Steele et al. and Grillo et al. disclose complex multi-component coatings comprising ingredients of many different classes of compounds, for example starches, cellulose derivatives, nut skins, plasticizers and maltodextrin. Applicants explain, in contrast to Steele et al. and Grillo et al. amended Claim 1 of the instant application recites a coating with antioxidative properties consisting of a single class of compound in a single layer.

Here, Steele et al. discloses a layer of a hydrophobic colloid film former consisting of an edible compound selected from the group consisting of acacia gum, cellulose derivatives and dextrans (p.8/L25-p.9/L3, *see* wherein a solution of hydrocolloid, i.e. gum acacia, is added to the peanuts to provide a uniform coating, p. 12/L24-30, p.13/L4-6). Clearly, Steele et al. discloses a coating consisting of a single class of compound in a single layer.

Additionally, applicants argue that neither Steele et al. nor Grillo et al. teach or suggest the antioxidative properties of the coating of the instant specification.

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Given modified Steele et al. disclose a coating composition identical to that presently claimed, it is clear that the composition would intrinsically display antioxidative properties.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elizabeth Gwartney whose telephone number is (571) 270-3874. The examiner can normally be reached on Monday - Friday; 7:30AM - 3:30PM EST..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Keith Hendricks can be reached on (571) 272-1401. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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/E. G./

Examiner, Art Unit 1794

/KEITH D. HENDRICKS/

Supervisory Patent Examiner, Art Unit 1794